## Fig. 1

Transition metal compound containing ligand having cyclopentadienyl skeleton

$$\begin{array}{c|c}
 & R^1 \\
 & R^2 \\
 & N \\
 & N \\
 & N \\
 & N \\
 & MX_n
\end{array}$$

M: transition metal atom of Group 4 or 5

R1 : aliphatic or alicyclic hydrocarbon group

R<sup>2</sup>- R<sup>5</sup>: hydrogen atom, hydrocarbon group or the like

R<sup>6</sup>: hydrocarbon group or the like

X : halogen, hydrocarbon group or the like

n : valence of M

m:1,2

Organoaluminum oxy-compound

lonizing ionic compound

Organoaluminum compound

(Carrier)

Organic compound component

Olefin Branched polyolefin

